THE EXPEDIENCY OF OPERATING AT ONE SITTING UPON THE BLADDER AND KIDNEY, WITH REPORT OF A CASE IN WHICH THE DOUBLE OPERATION WAS DONE.

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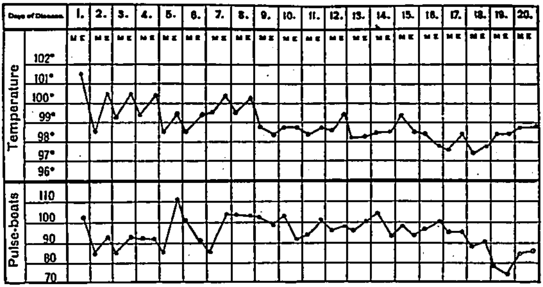
The necessity for several operations upon the urinary organs of one person does not often arise, and the following case recently in my care has been so suggestive as to warrant record.

J. B., male, white, aged fifty-six years, usual weight 150 pounds, now much lighter, was seen by me in June, 1889, and gave the following history: In 1884 he had an attack of what was called kidney colic by the physician in attendance; in March, 1887, he began to pass water frequently, then pain over the pubes was noticed, and discomfort in the perineum, especially after driving or other active exercise; in April, 1888, the calls to pass water were so frequent and so imperative that a rubber urinal was obtained and has since then been continually worn by day. A white deposit has been noticed in the urine during the past few months. Discomfort in the region of the left short ribs was noticed in March and still continues. The patient has often found his urine suddenly to cease flowing before the bladder had emptied itself, and on such occasions with a soft-rubber catheter he has obtained relief. Washing out the bladder with warm water has been tried but without advantage. Dryness of the mouth, especially for the past month or two, has been very annoying, and there is a clear history of exacerbations and remissions in intensity of symptoms during the past six months.

J. B. consulted me first at my office: his complexion was pasty, his pulse 100 to the minute, he sat down, and rose from a chair carefully so as to avoid jarring. I at once sounded, striking a stone not of large size nor of hard consistence. A lump painful on handling could be made out in the region of the left kidney by examination from in front; pain was elicited by pressure along the course of the left ureter. The patient was sent home, kept quiet, the bowels as well as the diet were regulated, and the urine examined. This latter was in fair amount, was alkaline and contained much pus, but one specimen, obtained the second day after coming under observation, was tolerably clear and distinctly acid. No casts were found, but they may have been masked by pus. Stone in the bladder and abscess in the left kidney were evident; I thought it probable that the right kidney was fairly healthy else the urine obtained as stated above would not have been so acid.

J. B. was sent into a private room at the University Hospital that he should be continuously under observation. During four days the temperature varied between 99° and 102° F., and other symptoms were not more favorable; so on the fifth day I opened the kidney through the usual incision in the loin, evacuating an ounce or so of pus, and then removed a stone by lateral lithotomy from the bladder. The kidney parenchyma where incised was about one-quarter of an inch thick; I attempted ineffectually to pass a soft instrument into the bladder from the abscess cavity along the ureter.

A good deal of shock followed the double operation; the same evening, however, the pulse was 112, and the temperature 99.5° Fahr. All went well for a week, when diarrhœa began, with irritable stomach and diminished secretion of urine. Dr. I. E. Atkinson, who saw the patient with me, suggested uncooked egg albumen as nourishment, so I ordered treatment and food as follows: white of egg ℥jss with blackberry brandy ℥ss every hour; Tinct. digitalis ♏v hypodermatically every four hours; an enema of starch-water q. s., with Tinct. opii deodor. gtt. xxx after each passage. Nothing else save crushed ice by the mouth was given. Improvement was shortly evident, the enemata were discontinued, then the digitalis; the egg and brandy was continued for ten days, when a more liberal diet was gradually permitted. A drainage tube was worn in the kidney wound for fifteen days; rapid healing followed its removal. The perineal wound was quite healed in less than three weeks. The patient went to the country four weeks after the double operation.



He is now (November, 1889) well and able to attend to the usual matters claiming his attention. Both wounds are closed by normal painless scars; the urine, which is passed in a full stream, is acid, sp. gr. 1022, and contains no pus.

The case related in the foregoing history differs from the usual run, and the question is properly raised, whether it is best to operate, as was done here, upon both diseased organs at one time, or whether they should be attacked consecutively? Furthermore, it will not be without profit to consider what method should be resorted to for the removal of the stone from the bladder under similar circumstances, for it goes without saying that the kidney required incision.

There is a history clearly pointing to the gradual undermining of the patient's constitution, owing to the presence of a urinary calculus, with the usual local suffering, progressively increasing in intensity. Latterly there were periods of fever at irregular intervals, with slightly chilly sensations occasionally, not amounting to rigors but yet pronounced enough to attract the patient's attention. Now, if there is one thing supported by the following statement of De Renzi. In few cities, the latter affirms, is there so much meat consumed as in Genoa, while in Naples the diet of the people is largely farinaceous. In the former, diabetes is so rare a disease that it is difficult to obtain a case for clinical purposes, whereas, in Naples, it is not uncommon to have twenty or thirty cases under treatment at one time.

An absolute and prolonged repose of the exhausted function of assimilating sugar is the therapeutic inference from these views, and this object is obtained by the following regimen: an exclusive diet of animal food for at least three months, excluding fish, either fresh or dried, mollusks, eggs, soup, the viscera of animals, excluding the liver and giving preference to the pancreas, cooked ham and pancreatized animal fats, such as lard and butter; salt and sometimes pepper, black tea and coffee, both without sugar, and instead of wine rectified alcohol in carbonated water, water flavored with orange flower, mint, fennel, anise, or cinnamon; and instead of vinegar, which often contains glucose, acetic or citric acid, added to water in minute quantity. All farinaceous and saccharine foods, all fruits, milk and milk foods, cognac, rum, and green vegetables are absolutely prohibited.

The only drugs to which Cantani attributes any value in the treatment of diabetes are alkalies, and preferably in the form of alkaline lactates. Such compounds are combustible by the diabetic organism, and may, therefore, supplement, to a certain extent, the non-combustible hydrocarbons. It is largely owing to the coincident administration of alkalies that apparent success has attended the treatment of diabetes by dietetic methods less rigorous than those of Cantani. The therapeutic virtues of Carlsbad, Vichy, Vals, and Neuenahr are due to the alkaline waters of these resorts, of which the effect is heightened by change of air, scene, and absence from business cares, the *procul negotiis*.

It is an interesting fact, of which many a parallel can be found in medical literature, that the two latest writers on diabetes, Ebstein and Cantani, are agreed as to the treatment of that disease, although their views regarding its pathogenesis are diametrically opposed. Ebstein having ascertained by ingenious experiments that carbonic acid retards the combustion of sugar outside of the body, employs this fact to explain the non-combustion of sugar by the diabetic. He holds that diabetes is due to a universal alteration of the protoplasm of the body, in virtue of which it produces from a given amount of carbon-containing substances less than the normal amount of carbonic acid. This diminished production of carbonic acid is insufficient to restrain within normal limits the action of the diastatic ferment upon the glycogen contained throughout the entire organism, and especially in the liver and muscles. In consequence an excessive amount of glycogen is converted into sugar, giving rise to the glycæmia and glycosuria of diabetes. Cantani, on the other hand, admits the diminished production of carbonic acid, but considers it a result, not a cause, of the disease. Ebstein's theory does not explain the disappearance of sugar from the urine shortly before death, which occurs even though sugar be administered to the patient, without unwarrantably assuming either that the diabetic, at this stage, produces enough carbonic acid to restrain the action of the diastatic ferment within normal limits, or that this ferment is entirely wanting,

The difference between the views of Cantani and Ebstein concerning the pathogenesis of diabetes is traceable to the different opinions held by each with reference to nutrition and tissue-change in health. Ebstein holds, with the majority of physiologists, that the ingested sugar, in health and disease, is converted into glycogen, and as such deposited in the organs and tissues. The healthy organism produces an amount of carbonic acid sufficient to restrain within combustible limits the conversion of glycogen into sugar, whereas the diabetic produces so little carbonic acid that the production of sugar is excessive, and overflows, so to speak, into the blood and urine.

On the other hand, Cantani believes in a direct combustion, without previous conversion into glycogen, of a large, perhaps the larger, portion of the ingested hydrocarbons, and recognizes in such combustion the principal source of animal heat. If, says he, we compare the quantity of sugar and urea in the urine with that of the ingested hydrocarbons and albuminates, we find them to correspond so exactly that we can regulate at will the amount of the former. This would scarcely be possible, if all the ingested hydrocarbons had first to be transformed into glycogen, and all the albuminous substances to be first appropriated by the organs and tissues. Again, if, after causing the sugar to disappear from his urine by fasting, we administer hydrocarbons to a diabetic, glycosuria will be observed two or three hours thereafter, a time too short for it to have been transformed into glycogen and again converted into sugar.

These are some of the many interesting points of this excellent paper, the eminently practical character of which is attested by the fact that the author's conclusions are based on a study of more than one thousand cases.

Marchiafava presents a short communication on malarial infection, confining his remarks to the alterations of the blood-corpuscles. He is more than ever convinced of the parasitic nature of malaria. In the debate following his paper Maragliano and Mosso call attention to the remarkable resemblance of degenerated blood-corpuscles to the forms held by Marchiafava and others to be of parasitic origin. Marchiafava replied that the resemblance is only superficial, and that a close comparison of the forms of degeneration with those of malarial poisoning brings the conviction that the two are totally distinct. The researches of Councilman and Osler have made the profession in America familiar with this subject. It is, therefore, of great interest and practical importance to bear in mind that the blood-corpuscles may undergo degenerative changes so closely resembling those of malarial infection that none but an expert could readily distinguish between them. Such changes have been observed in the blood of scarlet fever, and were erroneously attributed to the plasmodium malariæ.

Alberico Testi, of Faenza, contributes an interesting paper on the use of thymol in the treatment of typhoid fever. The properties of this substance are such as to render it the best of all known intestinal antiseptics, and the writer can confirm, from an abundant experience, all that Testi says in its favor. Its beneficial effect in typhoid fever is shown in the gradual and permanent reduction of temperature, the disappearance of meteorism, and the absence of notable nervous disturbance. That it acts as an intestinal antiseptic is proved by the diminution or disappearance of urinary ingredients, such as phenol and indican, which are known to be the result of intestinal decompositions and putrefactions. While it cannot be maintained that thymol exerts a specific action upon the Koch-Eberth bacillus, it is impossible to deny that it modifies, in a most favorable manner, the putrid intestinal processes to which the grave symptoms of typhoid fever are so largely due. Testi concludes by expressing his belief that, in the absence of specific remedies, the administration of thymol, combined, in the gravest cases, with a rational employment of hydrotherapy, offers the best prospect of success in the treatment of typhoid fever. F. P. H.

INDEX-CATALOGUE OF THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE, UNITED STATES ARMY. AUTHORS AND SUBJECTS. Vol. X.: *O—Pfutsch.* 4to., pp. [10] 1052. Washington: Government Printing Office 1889.

NINE times have we directed the attention of the profession to the predecessors of this noble volume—and the words of praise and congratulation we have repeatedly and truly used, may in all verity be applied to this member of an illustrious family. With safety and with pleasure can we for the tenth time speak of the greatness of the original scheme and the ability and energy with which it has been carried on. From the prefatory report by which Dr. Billings introduces the volume to the Surgeon-General we learn that Vol. X., "O—Pfutsch," includes 7,658 author-titles representing 2,905 volumes and 7,282 pamphlets. It also includes 14,265 subject-titles of separate books and pamphlets, and 29,421 titles of articles in periodicals. Usage accustoms us to almost everything, and until we pause to think of the vast field covered by and the multiplication of titles contained in this volume, we are apt to think of it as we do of other books which express the thoughts and labors of men's lives. As we con over a page, however, and find recorded the works by which some name has become familiar to us in the literature of our science—as we note the date of its first appearance, and so generally the date which terminated all work by it, we feel that there may be much of human interest, much appealing to human sympathy, even in so gravely scientific a work as this index-catalogue.

But enough is known to the profession concerning this great work so surely, steadily, yet withal slowly approaching its completion. The mechanical necessities attending the passage of a work like this through the press forbid us to hope for its very speedy completion, desirable as such a consummation must appear to every one interested in the progress of the work. Already the progress of medicine has made many things obsolete which were approved when Dr. Billings began his great work. Thus under the large heading of "Observations," so popular a few years ago, we notice some upon the lateral operation for stone, which when the catalogue was begun fairly represented the state of our knowledge; but now, within a short time, it has become a question whether that operation will at all survive, while it is certain the coming surgeons will never have the opportunity to achieve a reputation by extended series of cases recording how often they ventured up to the bladder through the narrow portals of the perineum with the bony pillar of the ischial and pubic rami on one side and the urethral bulb on the other.

Again it is our pleasant duty to congratulate Dr. Billings and the profession to which upon so many occasions he has been both an ornament and an aid, that his *magnum opus* is progressing so steadily and so well. S. A.